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LEYDIG VOIT & MAYER, LTD
TWO PRUDENTIAL PLAZA, SUITE 4900
180 NORTH STETSON AVENUE
CHICAGO, IL 60601-6780

EXAMINER

LEE, CHRISTOPHER E

ART UNIT PAPER NUMBER

2112

DATE MAILED: 03/26/2004

10

Please find below and/or attached an Office communication concerning this application or proceeding.

SK

Office Action Summary

Application No.

09/681,139

Applicant(s)

YAO ET AL.

Examiner

Christopher E. Lee

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24 is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Receipt Acknowledgement

1. Receipt is acknowledged of the Amendment filed on 17th of February 2004. Claims 1, 7, 8, 10, 17, 21 and 24 have been amended; no claim has been canceled; and no claim has been newly added since the last Office Action was mailed on 14th of August 2003. Currently, claims 1-24 are pending in this application.

Claim Objections

2. Claim 8 is objected to because of the following informalities:
- Substitute "the appropriate driver" by --the appropriate device driver-- in line 2.
- Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1, 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chrabaszcz [US 6,263,387 B1] in view of Jau et al. [US 6,205,505 B1; hereinafter Jau].

Referring to claim 1, Chrabaszcz discloses a server (i.e., server system 100 of Fig. 1) comprising: at least one port driver (i.e., adapter driver 308 of Fig. 4, such as network device driver 524 and mass storage device driver in Fig. 5), each port driver (i.e., adapter driver 308 of Fig. 4) corresponding to a port (i.e., slot 266 in Figs. 3 and 4) to which a port device (i.e., adapter 310 of Fig. 4, such as network device and mass storage device) can be connected (See col. 9, lines 8-9); and, an automatic plug-and-play component (i.e., hot-plug system driver 306 and hot-plug hardware 312 in Fig. 4; See Fig. 6 and Fig. 8) designed to detect connection (See col. 9, lines 8-17) of a port device (i.e., said adapter connected to said controllers for said peripheral devices) to a port (i.e., said slot) having a corresponding port driver (i.e., said adapter driver) selected (i.e., loaded) from said at least one port driver (i.e., step 816 in Fig. 8; See

col. 11, lines 55-57), said component without user intervention automatically installing (i.e., configuring) an appropriate device driver for said port device (i.e., installing network device driver or mass storage device driver) upon connection thereof to said port (See col. 11, lines 49-57; i.e., wherein in fact that if it is determined that additional data is not required, the program proceeds directly from state 812 to state 816, thus in state 816, the program automatically loads the appropriate driver implies that said monitor causing without user intervention automatic installation of an appropriate driver for said port device) upon connection thereof to said port (See col. 10, line 51 through col. 12, line 3), such that said port device is accessible by clients (i.e., client computers) communicatively coupled to said server (See col. 6, lines 1-7).

Chrabaszcz is silent that said automatic plug-and-play component is designed to detect disconnection of said port device, and automatically uninstalling said appropriate device driver upon disconnection of said port device from said port, such that said port device is inaccessible by said clients.

Jau teaches a specification of USB interface (See col. 1, lines 56-58), wherein an automatic plug-and-play component (i.e., PnP function in USB specification; See col. 1, line 62 through col. 2, line 4) is designed to detect disconnection of a port device from a port (i.e., detect disconnection of a peripheral from a personal computer, in fact, its port; See col. 2, lines 4-6), and automatically uninstalling (i.e., removing) an appropriate device driver (i.e., corresponding program for said peripheral) upon disconnection of said port device from said port (See col. 2, lines 6-7), such that said port device is inaccessible by clients (i.e., users; See col. 2, lines 7-8; i.e., wherein in fact that avoiding the users from using the corresponding programs to cause operational errors implies that said port device is inaccessible by clients).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said automatic disconnection, as disclosed by Jau, in said automatic plug-and-play component, as disclosed by Chrabaszcz, for the advantage of providing an avoidance of said clients (i.e.,

users) from using said port driver (i.e., corresponding program) to cause operational error (See Jau, col. 2, lines 7-8).

Referring to claim 2, Chrabaszcz teaches said port device is a printer (i.e., mass storage adapter 102, printer controller 120 and various printer 122 in Fig. 1).

Referring to claim 7, Chrabaszcz teaches said automatic plug-and-play component (i.e., hot-plug system driver 306 and hot-plug hardware 312 in Fig. 4; See Fig. 6 and Fig. 8) retrieves a plug-and-play identifier (i.e., Device ID and Vendor ID) from said port device (i.e., adapter connected to controllers for peripheral devices) upon connection of said port device to said port (See col. 4, lines 24-32), and selects said appropriate device driver based on said plug-and-play identifier (See col. 4, lines 32-35 and block 808 through block 818 in Fig. 8).

5. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chrabaszcz [US 6,263,387 B1] in view of Jau [US 6,205,505 B1] as applied to claims 1, 2 and 7 above, and further in view of Shih [US 6,509,981 B1].

Referring to claims 3-6, Chrabaszcz, as modified by Jau, discloses all the limitations of the claims 3-6, respectively, except that does not expressly teach said port is a parallel port or a serial port, and said serial port has a USB form factor or an IEEE1394 form factor.

Shih discloses a computer device (Fig. 5), wherein said computer device includes ports are a parallel port and serial ports, which have a USB form factor and an IEEE1394 form factor (See col. 4, lines 7-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said computer device, as disclosed by Shih, in said server, as disclosed by Chrabaszcz, as modified by Jau, for the advantage of providing a popular high speed serial ports, i.e., USB and IEEE-1394, and a popular parallel port for a parallel-bus printer (See Shih, col. 4, lines 19-22 and Fig. 5).

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chrabaszcz [US 6,263,387 B1] in view of Jau [US 6,205,505 B1] as applied to claims 1, 2 and 7 above, and further in view of Pleso [US 6,009,480 A].

Referring to claim 8, Chrabaszcz, as modified by Jau, discloses all the limitations of the claim 8 except that does not teach installing said appropriate device driver for said port device includes downloading said appropriate device driver from the Internet.

Pleso discloses an integrated device driver, wherein installing an appropriate device driver for a port device includes downloading said appropriate device driver from the Internet (See col. 13, lines 25-32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said downloading scheme, as disclosed by Pleso, in said server, as disclosed by Chrabaszcz, as modified by Jau, for the advantage of allowing and maintaining said port devices (i.e., peripheral devices) with the most current and compatible port device driver (i.e., peripheral device driver) software, which is disclosed at Pleso, col. 13, lines 33-35.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chrabaszcz [US 6,263,387 B1] in view of Jau [US 6,205,505 B1] as applied to claims 1, 2 and 7 above, and further in view of Sanders [US 5,734,831 A].

Referring to claim 9, Chrabaszcz, as modified by Jau, discloses all the limitations of the claim 9 except that does not said server is a server appliance lacking at least a dedicated keyboard and a dedicated monitor.

Sanders discloses a server (i.e., SERVER 10 of Fig. 1) is a server appliance (i.e., headless server) lacking at least a dedicated keyboard and a dedicated monitor (See col. 3, line 66 through col. 4, line 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied said headless server scheme with a remote interface computer, as disclosed by

Sanders, in said server, as disclosed by Chrabaszcz, as modified by Jau, for the advantage of said server is fully administered and reconfigured from a remote location (See Sanders, col. 4, lines 2-3).

8. Claims 10, 11 and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chrabaszcz [US 6,263,387 B1] in view of Jau [US 6,205,505 B1] and Gaither et al. [US 6,195,650 B1; hereinafter Gaither].

Referring to claim 10, Chrabaszcz discloses a computer program (i.e., operating system 304, hot-plug user interface 302, hot-plug system driver 306 and adapter driver 308 in Fig. 4) for execution by a processor (i.e., computer 101 of Fig. 1) of a server (i.e., server system 100 of Fig. 1) communicatively coupled to one or more clients (See col. 6, lines 1-7), said computer program comprising: at least one port driver (i.e., adapter driver 308 of Fig. 4, such as network device driver 524 and mass storage device driver in Fig. 5) corresponding to a port (i.e., slot 266 in Figs. 3 and 4) to which a port device (i.e., adapter 310 of Fig. 4) can be connected (See col. 9, lines 8-9); and, a monitor (i.e., a process for hot add of a device on a slot in Fig. 6 and a process of automatically configuring a server system in Fig. 8, which is implemented on operating system 304, hot-plug user interface 302 and hot-plug system driver 306 in Fig. 4) designed to monitor connection (See col. 9, lines 8-17) of a port device (i.e., said adapter connected to said controllers for said peripheral devices) to a port (i.e., said slot) selected (i.e., loaded) from said at least one port driver (i.e., step 816 in Fig. 8; See col. 11, lines 55-57), said monitor (i.e., said process for hot add of a device on a slot and said process of automatically configuring a server system) causing without user intervention automatic installation (i.e., configuration) of an appropriate driver for said port device (See col. 11, lines 49-57; i.e., wherein in fact that if it is determined that additional data is not required, the program proceeds directly from state 812 to state 816, thus in state 816, the program automatically loads the appropriate driver implies that said monitor causing without user intervention automatic installation of an appropriate driver for said port device) upon connection thereof to said port (See col. 10, line 51 through col. 12, line 3), such that said device is accessible by said clients (i.e., client computers).

Chrabaszcz is silent that said monitor is designed to detect disconnection of said port device, and does automatic uninstallation of said appropriate device driver upon disconnection of said port device from said port, such that said port device is inaccessible by said clients.

Jau teaches a specification of USB interface (See col. 1, lines 56-58), wherein a monitor (i.e., PnP function in USB specification; See col. 1, line 62 through col. 2, line 4) is designed to detect disconnection of a port device from a port (i.e., detect disconnection of a peripheral from a personal computer, in fact, its port; See col. 2, lines 4-6), and does automatic uninstallation (i.e., removal) of an appropriate device driver (i.e., corresponding program for said peripheral) upon disconnection of said port device from said port (See col. 2, lines 6-7), such that said port device is inaccessible by clients (i.e., users; See col. 2, lines 7-8; i.e., wherein in fact that avoiding the users from using the corresponding programs to cause operational errors implies that said port device is inaccessible by clients).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said automatic disconnection, as disclosed by Jau, in said monitor, as disclosed by Chrabaszcz, for the advantage of providing an avoidance of said clients (i.e., users) from using said port driver (i.e., corresponding program) to cause operational error (See Jau, col. 2, lines 7-8).

Chrabaszcz, as modified by Jau, does not teach said computer program comprises at least one port class driver, each port class driver designed to pass signals to and receive signals from a corresponding said port driver.

Gaither discloses a method for virtualizing file access operations, wherein a computer program (i.e., operating system in Fig. 2; See col. 4, lines 31-35) comprises at least one port class driver (i.e., SCSI block Disk Class Driver 38 and IDE block Disk Class Driver 40 in Fig. 2), each port class driver designed to pass signals to and receive signals from a corresponding said port driver (i.e., IDE port 30 or SCSI port 32 in Fig. 2; See col. 4, line 63 through col. 5, line 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have implemented said method, as disclosed by Gaither, on said computer program (i.e., operating system, hot-plug user interface, hot-plug system driver and adapter driver), as disclosed by Chrabaszcz, as modified by Jau, so as said computer program to execute said monitor (i.e., system utility) in a user mode, and said device drivers (i.e., I/O system services) in a kernel mode (See Gaither, col. 4, lines 33-35), for the advantage of providing a method of virtualizing file access operations and other I/O operations in said computer programs (i.e., operating systems) by performing string substitutions upon a file paths or other resource identifiers to convert the virtual destination of an operation to a physical destination, which is disclosed at Gaither, col. 4, lines 17-28.

However, the recitation in the claim, that “a machine-readable medium having stored thereon a computer program” has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *See Kropa v. Robie, 88 USPQ 478 (CCPA 1951).*

Referring to claim 11, Chrabaszcz teaches said port device is a printer (i.e., mass storage adapter 102, printer controller 120 and various printer 122 in Fig. 1).

Referring to claim 14, Chrabaszcz teaches said monitor (i.e., a process for hot add of a device on a slot in Fig. 6 and a process of automatically configuring a server system in Fig. 8) is implemented as a service (i.e., a process for hot add of a device on a slot and a process of automatically configuring a server system are a type of operating system that generally is meant to support other programs, such as user applications, that are directly accessed by said client computers; See col. 6, lines 1-18).

Referring to claim 15, Chrabaszcz, as modified by Jau and Gaither, teaches said monitor (i.e., applications and system utility 16 of Fig. 2; Gaither) resides in a user mode, and each of said at least one

port class driver (i.e., Disk Class Driver 28 in I/O system services in Fig. 2; Gaither) resides in a kernel mode, which is taught by Gaither at col. 4, lines 33-35.

Referring to claim 16, Chrabaszcz teaches said monitor incorporates monitoring logic (i.e. process of automatically configuring a server system in Fig. 8) implemented as a state-transition system (i.e., state-transition loop processing from state 800 depends on the conditions of states 804, 812, and 818 in Fig. 8).

Referring to claim 17, Chrabaszcz teaches said monitor (i.e., a process for hot add of a device on a slot in Fig. 6 and a process of automatically configuring a server system in Fig. 8) retrieves a plug-and-play identifier (i.e., Device ID and Vendor ID) from said port device (i.e., adapter connected to controllers for peripheral devices) upon connection of said port device to said port (See col. 4, lines 24-32), and selects said appropriate device driver based on said plug-and-play identifier (See col. 4, lines 32-35 and block 808 through block 818 in Fig. 8).

Referring to claim 18, Chrabaszcz teaches said program (i.e., operating system 304, hot-plug user interface 302, hot-plug system driver 306 and adapter driver 308 in Fig. 4) comprises a support component (i.e., configuration manager 500 of Fig. 5) designed to pass signals (i.e., configuration signals) from said monitor (i.e., a process for hot add of a device on a slot in Fig. 6 and a process of automatically configuring a server system in Fig. 8, which is implemented on operating system 304, hot-plug user interface 302 and hot-plug system driver 306 in Fig. 4) to said at least one port class driver and vice-versa (See Fig. 5 and col. 9, lines 20-24).

Referring to claim 19, Chrabaszcz, as modified by Jau and Gaither, teaches said support program (i.e., configuration manager 500 of Fig. 5; Chrabaszcz) resides in a user mode (See Gaither, col. 4, lines 33-35; i.e., wherein in fact that applications and system utilities are executed in user mode, and I/O system services are executed in kernel mode implies said support program (i.e., not related with I/O system services, but with managing adapters) resides in a user mode, not in a kernel mode).

9. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chrabaszc [US 6,263,387 B1] in view of Jau [US 6,205,505 B1] and Gaither [US 6,195,650 B1] as applied to claims 10, 11 and 14-19 above, and further in view of Shih [US 6,509,981 B1].

Referring to claims 12 and 13, Chrabaszc, as modified by Jau and Gaither, discloses all the limitations of the claims 12 and 13, respectively, except that does not expressly teach said port is a parallel port or a serial port.

Shih discloses a computer device (Fig. 5), wherein said computer device includes ports are a parallel port and serial ports (See col. 4, lines 7-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said computer device, as disclosed by Shih, in said server, as disclosed by Chrabaszc, as modified by Jau and Gaither, for the advantage of providing a popular high speed serial ports, i.e., USB and IEEE-1394, and a popular parallel port for a parallel-bus printer (See Shih, col. 4, lines 19-22 and Fig. 5).

10. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chrabaszc [US 6,263,387 B1] in view of Jau [US 6,205,505 B1] and Gaither [US 6,195,650 B1] as applied to claims 10, 11 and 14-19 above, and further in view of Slaughter et al. [US 6,202,147 B1; hereinafter Slaughter].

Referring to claim 20, Chrabaszc, as modified by Jau and Gaither, discloses all the limitations of the claim 20 including said support component (i.e., configuration manager 500 of Fig. 5; Chrabaszc) designed to pass signals (i.e., configuration signals) from said monitor (i.e., a process for hot add of a device on a slot in Fig. 6 and a process of automatically configuring a server system in Fig. 8, which is implemented on operating system 304, hot-plug user interface 302 and hot-plug system driver 306 in Fig. 4; Chrabaszc) to one of said at least one port class driver and vice-versa (See Chrabaszc , Fig. 5 and col. 9, lines 20-24), except that does not teach said support component comprises a first component and at least one second component, said first component designed to determine a number of ports of the server

and instantiate a number of said at least one second component equal to the number of ports, each second component designed to pass said signals.

Slaughter discloses a platform-independent device drivers, wherein a support component (i.e., security mechanism; See Figs. 7A-B and col. 9, lines 11-27) comprises a first component (i.e., bus manager 710 in Figs. 7A-B) and at least one second component (i.e., IC bus manager 1 708, IC bus manager 2 712, ... IC bus manager n 714 in Fig. 7A-B), said first component (i.e., bus manager) designed to determine a number of ports and instantiate a number of said at least one second component equal to the number of ports (See col. 9, lines 16-25; i.e., wherein in fact that each IC bus manager is assigned to one, and only one, of the device drivers, and appears to its assigned device driver as bus manager implies that said first component (i.e., bus manager) designed to determine a number of ports and instantiate a number of said at least one second component equal to the number of ports) of a server (i.e., computer system 100 of Fig. 1), each second component designed to pass signals (See col. 9, lines 25-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said support component (i.e., security mechanism), as disclosed by Slaughter, in said support component, as disclosed by Chrabaszcz, as modified by Jau and Gaither, for the advantage of providing avoidance of the problems of errant or rogue said port drivers (i.e., device drivers) as such drivers cannot gain access to said port device (i.e., system resource; See Slaughter, col. 9, lines 29-31).

Referring to claim 21, Slaughter teaches each of said first component and said at least one second component is implemented as an object (See col. 4, line 61 through col. 5, line 5).

11. Claim 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chrabaszcz [US 6,263,387 B1] in view of Jau [US 6,205,505 B1] and Gaither [US 6,195,650 B1] as applied to claims 10, 11 and 14-19 above, and further in view of Wang et al. [US 6,085,249 A; hereinafter Wang].

Referring to claims 22 and 23, Chrabaszcz, as modified by Jau and Gaither, discloses all the limitations of the claims 22 and 23, respectively, including said support component is able to pass signals

from said monitor to said at least one port class driver and vice-versa, except that does not expressly teach said support component is able to pass signals from an external monitor not residing at said server to said at least one port class driver and vice-versa.

Wang teaches a support component (i.e., software for server functionality; See col. 4, lines 25-26) is able to pass signals (i.e., digital media) from an external monitor (i.e., Web Server System 109 of Fig. 1), which is implemented as a web component (See col. 4, lines 27-30), and not residing at a server (i.e., Server Computer System 111 of Fig. 1) to at least one port class driver and vice-versa (See col. 4, lines 24-26 and col. 5, lines 65+).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said external monitor (i.e., Web Server System) with web server functionality, as disclosed by Wang, in said server, as disclosed by Chrabaszcz, as modified by Jau and Gaither, so said support component as to coupled with said external monitor for the advantage of providing said clients (i.e., client computers) with appropriate web browsing software, view HTML pages provided by said external monitor (i.e., web server system), which is disclosed at Wang, col. 4, lines 27-30).

Response to Argument

12. Applicants' arguments filed on 17th of February 2004 (hereinafter the Response) page 11, line 1 through 13, line 2, have been fully considered but they are not persuasive.

In response to the Applicants' argument with respect to "The Office Action asserts that Col. 2, lines 4 through 7 of Jau disclose the uninstalling step as recited in claim 1. However, the program as described in Jau is removed when the peripheral is disconnected ... Applicants submit that the removal of the program in Jau is not the same as uninstalling the appropriate device driver as recited in the claims. ... In other words, even under the broadest reasonable interpretation, the use of the term "removed" as described in Jau is not the same as the "uninstalling" recited in the claims. ..." on the Response page 11, line 25 through page 12, line 5, the Examiner respectfully disagrees. In fact, the Applicants' arguments

fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. In other words, the Applicants merely allege that the use of the term removed as described in Jau is not the same as the uninstalling recited in the claims without specifically pointing out how the language uninstalling of the claim patentably distinguishes it from the term removed of Jau reference. In contrary to the Applicants' statement, the subject matter "uninstalling the appropriate device driver" in the claimed invention is defined such that the port device is inaccessible by the clients (See claim 1, lines 9-10), which is clearly suggested by Jau, at col. 2, lines 4-8, i.e., removing (uninstalling) corresponding programs (appropriate device driver), thereby avoiding the users (the clients) from using the corresponding programs (i.e., inaccessible to appropriate device driver by the users) to cause operational errors. Thus, the Applicants' argument on this point is not persuasive.

In response to the Applicants' argument with respect to "Moreover, the Office Action asserts that Col. 10, line 51 through Col. 12, line 3, of Chrabaszcz disclose the installing step as recited in claim 1. However, Chrabaszcz describe that in state 814, the program announce the detection of the new device and prompts a user to enter the additionally required values ... Because Chrabaszcz requires user interaction, it is not automatic. ..." on the Response page 12, lines 6-15, the Examiner respectfully disagrees. In contrary to the Applicants' statement, Chrabaszcz does not require user interaction when it is determined that additional data is not required. In fact, Chrabaszcz suggests the claimed limitation "server comprising (i.e., open-transitional phrase) automatically installing an appropriate device driver", such that the program (the components) proceeds directly from state 812 to state 816, thus in state 816, automatically loads (installs) the appropriate driver (appropriate device driver) if it is determined that additional data is not required (no user prompt to enter additionally required values), which is disclosed at col. 11, lines 49-57. Thus the Applicants' argument on this point is not persuasive.

In response to the Applicants' arguments with respect to the claim 24 rejection under 35 U.S.C. 103(a) as being unpatentable over Lach on the Response page 13, lines 3+ have been fully considered and are persuasive. The rejection of the claim 24 has been withdrawn.

Allowable Subject Matter

13. Claim 24 is allowed.

14. The following is a statement of reasons for the indication of allowable subject matter:

The Applicants' arguments in the Response filed on 17th of February 2004, page 13, lines 3+ are persuasive regard patentability of the invention as disclosed in the claims.

Conclusion

15. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

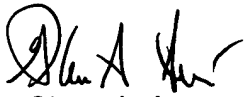
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E. Lee whose telephone number is 703-305-5950. The examiner can normally be reached on 9:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H. Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher E. Lee
Examiner
Art Unit 2112

cel/ *oa*


Glenn A. Auve
Primary Patent Examiner
Technology Center 2100